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Solid Waste Facility Permit

Under the provisions of N.J.S.A. 13:1E-1 et seq. known as the Solid Waste Management Act, this permit is hereby issued to:

E.I. DuPont de Nemours & Company, Incorporated

Facility Type:	Class III Sanitary Landfill
Lot No.:	1
Block No.:	185
Municipality:	Carney's Point Township and Pennsville Township
County:	Salem
Facility Registration No.:	1713B

This permit is subject to compliance with all conditions specified herein and all regulations promulgated by the Department of Environmental Protection.

This permit shall not prejudice any claim the State may have to riparian land, nor does it allow the Permittee to fill or alter or allow to be filled or altered in any way, lands that are deemed to be riparian, wetlands, stream encroachment areas or flood plains, or that are within the Coastal Area Facility Review Act (CAFRA) zone or are subject to the Pinelands Protection Act of 1979, nor shall it allow the discharge of pollutants to waters of this State without prior acquisition of the necessary grants, permits, or approvals from the Department of Environmental Protection.

June 7, 2001  
Issuance Date

Signed by Thomas Sherman, Assistant Director  
Thomas Sherman  
Assistant Director  
Office of Permitting &  
Technical Programs

June 7, 2006  
Expiration Date

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Scope of Permit

The E.I. DuPont de Nemours & Company owns the "A" and "B" landfills (considered a single solid waste facility numbered 1713B) which are located on Lot 1, Block 185 in Deepwater, Salem County. The facility originally received a Solid Waste Facility Permit on June 10, 1975. This is an expansion of the original facility that has run out of capacity. This vertical expansion will be located on the "B" landfill only. The "A" site is 27 acres and the "B" site is 19 acres.

The landfill has been classified as a Class III landfill permitted only to accept waste type 13C from DuPont's on-site activities. Specifically, the landfill is being expanded for the disposal of construction and demolition waste. No other waste types or commercial wastes will be accepted for disposal at this landfill. The landfill's environmental engineering construction and design consists of ground water monitoring wells, passive gas venting at closure and a synthetic cap for closure. The larger site, upon which the landfill sits, has extensive monitoring and ground water pumping including ground water underneath this landfill.

This permit does not convey any property rights of any sort, or any exclusive privilege. Failure to comply with all of the conditions specified herein may result in revocation of this permit and/or may result in such other regulatory or legal actions that the Department is authorized by law to institute.

Section I

General Conditions Applicable to All Permits

1. Duty to Comply

- (a) Pursuant to N.J.A.C. 7:26-2.8(i), the Permittee shall operate the facility in compliance with the requirements of N.J.A.C. 7:26-2.11.
- (b) Pursuant to N.J.A.C. 7:26-2.8(j), the Permittee shall operate the facility in conformance with all of the conditions, restrictions, requirements and any other provisions set forth in this permit.
- (c) Pursuant to N.J.A.C. 7:26-2.8(k), except for minor modifications as set forth at N.J.A.C. 7:26-2.6(d), the Permittee shall not modify, revise or otherwise change any condition of this permit without prior written approval of the Department.

2. Duty to Reapply

- (a) Pursuant to N.J.A.C. 7:26-2.7(b)1, if the Permittee wishes to continue the operation of this facility after the expiration date of this permit, the Permittee shall apply for permit renewal at least 90 days prior to the expiration date of this permit, and the facility must be included in the District Solid Waste Management Plan at the time of such application.
- (b) Pursuant to N.J.A.C. 7:26-2.7(c), the conditions of this permit shall continue in force beyond the expiration date of this permit pursuant to the Administrative Procedure Act, N.J.S.A. 52:14B-11, until the effective date of a new permit if:
  - 1. The Permittee has submitted a timely and complete application for a renewal permit pursuant to (a) above; and
  - 2. The Department, through no fault of the Permittee, does not issue a new permit with an effective date on or before the expiration date of this permit, due to time or resource constraints.
- (c) Pursuant to N.J.A.C. 7:26-2.7(d), permits continued under said section remain fully effective and enforceable, and if the Permittee is not in compliance with any one of the conditions of the expiring or expired permit the Department may choose to do any or

all of the following:

1. Initiate enforcement action based on the permit, which has been continued;
2. Issue a notice of intent to deny the new permit under N.J.A.C. 7:26-2.4. If the permit is denied, the Permittee would then be required to cease activities and operations authorized by the continued permit or be subject to an enforcement action for operating without a permit;
3. Issue a new permit under N.J.A.C. 7:26-2.4 with appropriate conditions; or
4. Take such other actions as are authorized by N.J.A.C. 7:26-1 et seq. or the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq.

3. Need to Mitigate

- (a) Pursuant to N.J.A.C. 7:26-2.8(p), should the Department determine that the facility is operating in an environmentally unsound manner, the Permittee shall:
  1. Within 90 days of notification by the Department, submit a plan to close or environmentally upgrade the facility in conformance with the applicable standards, as determined by the Department and set forth in N.J.A.C. 7:26-1 et seq.;
  2. Within 90 days of receipt of written approval by the Department of the submitted plan, begin to close or construct the environmental upgrading at the facility; and
  3. Within one year of receipt of written approval by the Department of the submitted plan, complete closure or construction of the environmental upgrading at the facility.
- (b) Pursuant to N.J.A.C. 7:26-2.8(q), a one time extension of the compliance schedule established by N.J.A.C. 7:26-2.8(p) shall be granted by the Department provided the Permittee demonstrates that it has made good faith effort to meet the schedule.
- (c) Pursuant to N.J.A.C. 7:26-2.8(r), should the environmental upgrading required pursuant to N.J.A.C. 7:26-2.8(p) not be completed or should continued operations be determined by the Department to be

environmentally unsound despite the implementation of the plan approved pursuant to N.J.A.C. 7:26-2.8(p), the facility shall temporarily or permanently cease operations and close or enter into receivership, as provided for in N.J.S.A. 13:1E-9, for that period of time necessary to rectify the environmentally unsound conditions.

#### 4. Permit Actions

- (a) Pursuant to N.J.A.C. 7:26-2.6(a)1, if cause exists, the Department may modify, or revoke and reissue this permit, subject to the limitations of that section, and may require the Permittee to submit an updated or new application in accordance with N.J.A.C. 7:26-2.6(e), if appropriate.
- (b) Pursuant to N.J.A.C. 7:26-2.6(b), the Department may modify or, alternatively, revoke and reissue this permit if cause exists for termination under N.J.A.C. 7:26-2.6(c) and the Department determines that modification or revocation and reissuance is appropriate.
- (c) Pursuant to N.J.A.C. 7:26-2.6(d), upon the request of the Permittee, an interested party or for good cause, the Department may make certain minor modifications to a permit without issuing a tentative approval, providing public notice thereof or holding a public hearing thereon.
- (d) Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, the Permittee shall promptly submit such facts or information.

#### 5. Signatory Requirements

- (a) All completed registration statements submitted by the Permittee shall be signed as specified at N.J.A.C. 7:26-2.4(e)1.
- (b) All engineering designs and reports, the environmental and health impact statement, other information requested as "Addendums" by the Department pursuant to N.J.A.C. 7:26-2.4(f) and (g)4 and documents required to be submitted pursuant to N.J.A.C. 7:26-2.9 and 2.10, submitted on behalf of the Permittee, shall be signed by a person described in N.J.A.C. 7:26-2.4(e)1 or by a duly authorized representative of that person, as specified at N.J.A.C. 7:26-2.4(e)2.

- (c) Any person signing a registration statement, engineering design or report, environmental and health impact statement or addendum mentioned in N.J.A.C. 7:26-2.4(e)1 or (e)2, submitted on behalf of the Permittee, shall make the certification specified at N.J.A.C. 7:26-2.4(e)3.

## 6. Transfers

- (a) Pursuant to N.J.A.C. 7:26-2.8(1), the Permittee shall not transfer ownership of the permit without receiving prior written approval of the Department, in accordance with N.J.A.C. 7:26-2.7(e).
- (b) Pursuant to N.J.A.C. 7:26-2.7(e)1, a written request for permission to allow any transfer of ownership or operational control of the facility must be received by the Department at least 180 days in advance of the proposed transfer. The request for approval shall include the following:
  - 1. A registration statement completed by the prospective new Permittee on forms provided by the Department;
  - 2. A disclosure statement as required by N.J.A.C. 7:26-16.4 completed by the proposed transferee;
  - 3. A demonstration that the final responsibility requirements of N.J.A.C. 7:26-2A.9 will be met by the proposed new Permittee; and
  - 4. A written agreement between the Permittee and the proposed new Permittee containing a specific future date for transfer of ownership or operations.
- (c) Pursuant to N.J.A.C. 7:26-2.7(e)2, a new owner or operator may commence operations at the facility only after the existing permit has been revoked and a permit is issued pursuant to N.J.A.C. 7:26-2.4.
- (d) Pursuant to N.J.A.C. 7:26-2.7(e)3, the Permittee of record remains liable for ensuring compliance with all conditions of the permit unless and until the existing permit is revoked and a new permit is issued in the name of the new owner or operator.
- (e) Pursuant to N.J.A.C. 7:26-2.7(e)4, compliance with the transfer requirements set forth in that subsection shall not relieve the Permittee from the separate

responsibility of providing notice of such transfer pursuant to the requirements of any other statutory or regulatory provision.

7. Registration Statement

- (a) Pursuant to N.J.A.C. 7:26-2.8(b), prior to May 1 of each calendar year the Permittee shall submit to the Department a statement updating the information contained in the Permittee's initial registration statement. This update shall be on forms furnished by the Department. In no case shall submission of an updated statement alter conditions of this permit.
- (b) Pursuant to N.J.A.C. 7:26-2.8(c), the Permittee shall notify the Department in writing within 30 days of any change in the information set forth in the Permittee's current registration statement.
- (c) Pursuant to N.J.A.C. 7:26-2.8(d), failure of the Permittee to submit an updated registration statement and to submit all applicable fees, required by N.J.A.C. 7:26-4, on or before July 1 of each calendar year shall be sufficient cause for the Department to revoke this permit or take such other enforcement action as is appropriate.

8. Duty to Update Disclosure Statement

The regulations established at N.J.A.C. 7:26-16.6(b) and N.J.A.C. 7:26-16.6(c) are not applicable since the Permittee is the operator of the facility.

9. Operating Record and Reporting Requirements

- (a) The Permittee shall maintain a daily record of wastes received. The record shall include the information specified at N.J.A.C. 7:26-2.13(a).
- (b) The daily record shall be maintained, shall be kept, and shall be available for inspection in accordance with N.J.A.C. 7:26-2.13(b).
- (c) The Permittee shall submit monthly summaries of wastes received to the Division of Solid and Hazardous Waste, Bureau of Recycling and Planning and the Solid Waste Coordinator for the district where the facility is located, on forms provided by the Department (or duplicates of same), no later than 20 days after the last day of each month. The monthly summaries shall include the information specified at N.J.A.C. 7:26-



2.13(e).

10. Conformance to the District Solid Waste Management Plan

Pursuant to N.J.A.C. 7:26-6.12(b), the Permittee shall operate the facility in compliance with any applicable district solid waste management plan(s) as well as any amendments to and/or approved administrative actions concerning such plan(s). Should the Permittee fail to comply with any applicable district solid waste management plan(s) as well as any amendment to or approved administrative actions concerning such plan(s), the Permittee shall be deemed in violation of N.J.S.A. 13:1E-1 et seq. and N.J.A.C. 7:26-1 et seq. and shall be subject to applicable penalties provided thereunder, and any other applicable laws or regulations.

11. Compliance with Other State Regulations and Statutes

Pursuant to N.J.A.C. 7:26-2.8(h), the issuance of this permit shall not exempt the Permittee from obtaining all other permits or approvals required by law or regulations.

End of Section I

Section IIGeneral Operating Requirements1. General Operating Requirements for All Solid Waste Facilities

Pursuant to N.J.A.C. 7:26-2.11, the facility must be operated in compliance with the following general operating requirements:

- (a) Within each 24-hour period the operator shall cover the waste with the appropriate cover material.
- (b) Facility property surrounding the actual disposal area shall be maintained free of litter, debris, and accumulations of unprocessed waste, process residues and effluents.
- (c) Methods of effectively controlling dust shall be implemented at the facility in order to prevent offsite migration.
- (d) The operation of the facility shall not result in the emission of air contaminants in violation of N.J.A.C. 7:27-5.2(a).
- (e) The operator shall maintain all facility systems and related appurtenances in a manner that facilitates proper operation and minimizes system downtime. When requested, the operator of the facility shall furnish proof that provisions have been made for the repair and replacement of equipment that becomes inoperative.
- (f) An adequate water supply and adequate fire-fighting equipment shall be maintained at the facility or be readily available to extinguish any and all types of fires. Fire-fighting procedures as delineated in the approved O and M manual, including the telephone numbers of local fire, police, ambulance and hospital facilities, shall be posted in and around the facility at all times.
- (g) The operator shall effectively control insects, other arthropods and rodents at the facility by means of a program in compliance with the requirements of the New Jersey Pesticide Control Code, N.J.A.C. 7:30, and implemented by an applicator of pesticides, certified in accordance with the New Jersey Pesticide Control Code, N.J.A.C. 7:30.

- (h) The operator shall at all times comply with the conditions of this SWF permit, as well as all other permits or certificates required and issued by the Department or any other governmental agency. The operator shall not receive, store, handle, process or dispose of waste types not specifically identified in this SWF permit or other permit or certificate issued by the Department.
- (i) The operator shall maintain a record of the quantity of each authorized waste type accepted for disposal, in accordance with N.J.A.C. 7:26-2.13.
- (j) Departmental inspectors shall have the right to enter and inspect any building or other portion of the facility, at any time. This right to inspect includes, but is not limited to:
  - 1. Sampling any materials on site;
  - 2. Photographing any portion of the facility;
  - 3. Investigating an actual or suspected source of pollution of the environment;
  - 4. Ascertaining compliance or non-compliance with any statutes, rules, or regulations of the Department, including conditions of this SWF permit or other permit or certificate issued by the Department; or
  - 5. Reviewing and copying all applicable records, which shall be furnished upon request and made available at all reasonable times for inspection.
- (k) The quantity of waste received by the facility operator shall not exceed the system's designed handling, storage, processing or disposal capacity as identified in this SWF permit or other permit certificate. The designed processing and disposal capacity approved within the solid waste facility permit, or any other permit certificate or approval conditions as a ton per day operational maximum shall be inclusive of all solid waste received at the facility as well as all tonnages of source separated recyclables received.
- (l) The facility shall be operated in a manner that employs the use of the equipment and those techniques for the receipt, storage, handling, processing or disposal of incoming waste and process residues that are specifically authorized by the SWF permit.

- (m) The approved final O and M manual shall be maintained at the Deepwater plant. A written description of any proposed changes to the approved, final O and M manual shall be submitted to the Department for review. These proposed changes should not be implemented at the facility until the Department approves the changes.

2. General Operating Requirements for Class III Sanitary Landfills

All Class III sanitary landfills shall be operated in accordance with the requirements set forth in N.J.A.C. 7:26-2.8, and the following additional operational, maintenance, inspection and monitoring requirements as set forth in N.J.A.C. 7:26-2A.8.

The sanitary landfill shall be operated in accordance with the following additional minimum requirements:

(a) Working Face

1. The working face shall be confined to the smallest practical area, as is consistent with the proper operation of trucks and equipment, in order that the area of waste material exposed during the operating day is minimized. The width of the working face shall be no greater than 150 feet.
2. All waste shall be thoroughly compacted throughout the operational day to yield the smallest practical volume.
3. Solid waste shall be compacted in shallow layers. The layers should be less than two feet in thickness and should be compacted with a minimum of four passes of the compaction equipment.
4. The lift height of the daily cell, as measured vertically from the previous day's cover surface, shall not exceed 12 feet.
5. The slope of the working face shall be maintained so as to maximize compaction of the solid waste and minimize infiltration into the solid waste. The slope shall be no steeper than three horizontal to one vertical (3:1).

(b) Daily, Intermediate and Final Cover

1. The daily covering of solid waste shall be a progressive operation so that no greater than 15,000 square feet of solid waste is exposed at any time throughout the operating day for each 150 feet of working face.
2. All exposed surfaces of solid waste shall be covered at the close of each operating day with a minimum of six inches of daily cover, unless the solid waste meets the following:
  - i. The uncovered solid waste will not create an environmental or public health nuisance as determined by the Department;
  - ii. The uncovered solid waste will not create a safety hazard as determined by the Department;
  - iii. The solid waste is a clean fill; and,
  - iv. The solid waste is an inert material.
3. Intermediate cover, a minimum of 12 inches of cover material, shall be applied to all surfaces to be exposed for any period exceeding 24 hours.
4. The grade and thickness of the intermediate and final cover material on all surfaces shall be maintained until stabilized. All cracks, erosion swales, rills and uneven areas shall be maintained to prevent extrusion of solid waste and to minimize infiltration and ponded water.
5. All areas with intermediate cover shall be graded so as to facilitate drainage of run-off to the surface drainage system and minimize infiltration and ponded water.
6. Heavy clays and very fine grain materials, such as fly ash, shall not be used as daily and intermediate cover. The daily and intermediate cover material should be of a quality that is manageable under all weather conditions. A sufficient quantity of cover material shall be at the site to adequately meet the requirements of (b)1 through 4 above. For landfills without on-site supplies of cover material, a standby supply for cover material equal to 25 percent of the volume of waste received and compacted at the

landfill in 10 normal disposal days shall be stored within the boundaries of the landfill property.

6. Final cover constructed in accordance with N.J.A.C. 7:26-2A.7(i) shall be applied to all surfaces where the final approved elevation has been reached and to all surfaces when the landfill operation is terminated.
7. There shall be sufficient types of quantities of equipment for digging, spreading, compacting or covering waste or applying cover material to adequately meet the requirements of (b)1 through 4 above, to ensure a smooth flow of traffic at the working face and to achieve the maximum compaction efficiencies.
8. Sanitary landfill equipment shall be equipped with hand-portable fire extinguishers of a multipurpose dry chemical type, an automatic fire suppression system, and rollover protection structures and any other safety equipment required by the Occupational Health and Safety Administration standards.
9. In case of breakdown of the equipment required by (b)8 above, the Permittee shall repair the equipment or obtain replacement equipment within 24 hours after breakdown. Unless sufficient types and quantities of replacement equipment meeting the requirements of (b)8 above are available on-site, written maintenance contracts with a local equipment dealer shall be in force at all times. A copy of the contract shall be submitted with the O and M manual to verify compliance with this requirement.

(c) Access

1. Access to the sanitary landfill for solid waste disposal shall be permitted only during the operating hours set by the Division of Solid and Hazardous Waste Management and shall be restricted to 7:00 A.M. to 7 P.M. in areas within 1000 feet of a residential zone.
2. The sanitary landfill shall have an entrance gate posted with the operating hours that can be locked to prevent unauthorized entry into the facility.

(d) Housekeeping

1. Dust control shall be effected by the spraying of water or the spreading of calcium chloride or an equivalent approved by the Department, as needed. Spraying of waste oil is prohibited.
2. The sanitary landfill shall not cause any air contaminant to be emitted in violation of N.J.A.C. 7:27-5.2(a). Malodorous emissions shall be controlled by the use of daily cover. In the event that this is not satisfactory, a suitable deodorant shall be used. Malodorous solid waste shall be covered immediately after unloading with a minimum of six inches of cover material or approved alternative material.
3. The sanitary landfill shall be operated in a manner that minimizes the propagation and harborage of insects, rodents, and birds.
4. The sanitary landfill shall be operated in a manner that will protect all monitoring devices and environmental systems from damage. Any damage shall be immediately reported to the Department at 1(877) WARNDP.
5. Any monitoring device or environmental control system which is damaged so as to impair the proper operation of the monitoring device or environmental control system shall be reconstructed in accordance with the following:
  - i. The operator shall repair the monitoring device or environmental system in accordance with the plans and schedule approved by the Department; and
  - ii. The Department may require immediate remedial action for repair of the damaged monitoring device or environmental control system should such damage endanger human health or the environment.
6. The sanitary landfill shall be operated in a manner which will facilitate the filling of each section to final grade and which will minimize the operational phase of each section.

(e) Facility Staffing

1. An adequate number of qualified personnel shall be at the sanitary landfill to maintain the smooth flow of traffic at the sanitary landfill and to operate the sanitary landfill in a manner that is in compliance with the requirements of the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., N.J.A.C. 7:26, and the conditions of this SWF permit.
2. A supervisor shall be at the sanitary landfill/plant site during all operating hours to ensure proper operation of the sanitary landfill, to evaluate the monitoring data and inspection reports, to determine the performance of the sanitary landfill and to direct and implement all operational decisions to ensure the facility's compliance with the requirements of the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., N.J.A.C. 7:26, and the conditions of this SWF permit.

(f) Facility Personnel Training

1. All sanitary landfill personnel who are involved in waste management activities or who operate, service or monitor any facility equipment, machinery or system, shall complete a program of on-the-job training which shall include, at a minimum, the following:
  - i. The training program shall be directed by a person thoroughly familiar with the technology being utilized at the facility and the conditions of this SWF permit.
  - ii. The training shall include instruction in the operation and maintenance of the equipment, machinery and systems which facility personnel must operate service or monitor in the course of their daily job duties. The training shall instruct facility personnel in the performance of their duties in a manner that ensures the facility's compliance with the requirements of the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., N.J.A.C. 7:26, and the conditions of this SWF permit.
  - iii. The training program shall ensure that the



facility personnel are able to effectively respond to any equipment malfunction or emergency situation that may arise.

- iv. The training program shall provide instruction in the use of safety and emergency equipment and the use of communication or alarm systems.
  - v. The training program shall provide instruction in the procedures for emergency response for sanitary landfill fires or explosions, gas leaks, leachate treatment system failure or leaks, detention basin breaches or other emergencies and shall include procedures to shut down operations.
- 2. The sanitary landfill facility personnel shall complete the initial training program required by (f)1 above within six months after the date of their employment.
  - 3. The sanitary landfill facility personnel shall take part in an annual update of the initial training program.
  - 4. Training records that document the type and amount of training received by current facility personnel shall be kept until closure of the sanitary landfill.

(g) Emergency Actions

- 1. The following actions shall be implemented in the case of an emergency:
  - i. The supervisor or emergency coordinator shall immediately identify the character, exact source, amount and extent of any discharged materials and notify appropriate State or local agencies with designated response roles if their help is needed.
  - ii. Concurrently, the supervisor or emergency coordinator shall assess possible hazards to public health or the environment that may result from the discharge, fire or explosion. This assessment shall consider both direct and indirect effects.
  - iii. If the supervisor or emergency coordinator

determines that the facility has had an uncontrolled discharge, a discharge above standard levels permitted by the Department, or a fire or explosion, he or she shall:

- (1) Immediately notify appropriate local authorities if the assessment indicates that evacuation of local areas may be advisable.
  - (2) Immediately notify the Department at 1-877-WARN DEP.
  - (3) When notifying the Department, report the type of substance and the estimated quantity discharged, if known, the location of the discharge, actions the person reporting the discharge is currently taking or proposing to take in order to mitigate the discharge and any other information concerning the incident which the Department may request at the time of notification.
- iv. The supervisor shall take all reasonable measures to ensure that fires, explosion and discharges do not recur or spread to other areas of the facility. These measure shall include, where applicable, the cessation of operations and the collection and containment of released waste.
  - v. Immediately after an emergency, the supervisor or emergency coordinator shall provide for treating, storing or disposing of waste, contaminated soil or water or any other material contaminated as a result of the discharge, fire or explosion.
  - vi. The supervisor or emergency coordinator shall ensure that no waste is processed until cleanup procedures are completed and all emergency equipment listed in the contingency plan is again fit for its intended use.
  - vii. The supervisor or emergency coordinate shall notify the Department and appropriate local authorities when operations in the affected area of the facility have returned to normal.
  - viii. Within 15 days after the incident, the

supervisor or emergency coordinator shall submit a written report on the incident to the Department. The report shall include, but not be limited to:

- (1) The name, address, and telephone number of the facility.
- (2) The date, time and description of the incident.
- (3) The extent of injuries, if applicable, with names and responsibilities indicated.
- (4) An assessment of actual damage to the environment, if applicable.
- (5) An assessment of the scope and magnitude of the incident.
- (6) A description of the immediate actions that have been initiated to clean up the affected area and prevent a recurrence of a similar incident.
- (7) An implementation schedule for undertaking longer term measures to effect cleanup and avoid recurrence of the incident, if applicable.

(h) On-Site Baseline

1. An on-site baseline consisting of two vertical and horizontal control monuments shall be constructed and installed in accordance with the Map Filing Law, N.J.S.A. 46:23-9.9 et seq., and the Department's specifications in the "Guidelines for Establishing Vertical and Horizontal Control Monuments on Sanitary Landfills" available from the Division of Solid and Hazardous Waste, Bureau of Landfill and Recycling Management.
2. The control monuments shall be installed with, at a minimum, Second Order accuracy in accordance with the "Classification, Standards of Accuracy, and General Specifications of Geodetic Control Survey", published by the U.S. Department of Commerce, 1980.
3. The control monuments shall be tied into the

national or state geodetic survey network and keyed into the North American Datum of 1983.

(i) Fire Fighting

1. In case of a fire on an active sanitary landfill, the responsibility for fire control shall lie with the SWF permit holder.
2. The owner or operator of any landfill wherein smoldering, smoking or burning is occurring shall immediately notify the local police and fire department having jurisdiction and the Department hot-line 1-877-WARN DEP.
3. The owner or operator of any active landfill shall be responsible for initiating and continuing fire-fighting actions until all smoldering, smoking and burning ceases.
4. The owner or operator of any landfill shall seek and obtain fire-fighting assistance if smoldering, smoking or burning persists for longer than 24 hours.
5. The owner or operator of any landfill shall not conduct disposal activities within the burning area. Precautions shall be taken to prevent disposal activities from interfering with fire-fighting activities.
6. Any disruption of the finished grade or covered surface shall be repaired and recovered upon completion of fire-fighting activities.

3. General Maintenance and Inspection Requirements for Class III Sanitary Landfills

- (a) While the sanitary landfill is in operation all environmental control systems shall be maintained in a proper functioning manner and shall be inspected to ensure compliance with the operational and construction/requirements and the design and performance standards.
- (b) The inspections, required by (a) above, shall be performed, unless otherwise stated, on a weekly basis and after storm events to detect evidence or deterioration, malfunction or improper operation.
- (c) The owner and/or operator shall record the results of

the inspections in a log book or by means of an electronic records storage system approved by the Department which shall be maintained at the sanitary landfill/plant office and be accessible, at all times, for inspection by the Department. These records shall include the date and time of the inspection, the name of the inspector, a notation of observations and recommendations and the date and nature of any repairs or other remedial action.

- (d) If deterioration which would result in failure, malfunction or improper operation is evident during inspection, the operator shall make repairs in accordance with condition 2(d)5 of Section II "General Operating Requirements for Class III Sanitary Landfills" and as listed in the approval final O and M manual.
- (e) The sanitary landfill shall be maintained and inspected by the owner and/or operator in accordance with the following additional minimum requirements:
  - 1. The vertical and horizontal control monuments shall be maintained and resurveyed by a licensed New Jersey Land Surveyor and certified for accuracy biennially. The survey shall be, at a minimum, second order accuracy in accordance with the "Classification Standards of Accuracy, and General Specifications of Geodetic Control Survey" published by the U.S. Department of Commerce 1980. The control monuments shall be tied into the national or state geodetic survey network.
  - 2. All emergency equipment shall be maintained in a proper functioning manner. The equipment shall be tested on an annual basis.
  - 3. The structural integrity of the vents, manifolds and piping of the gas venting system shall be maintained to insure a free flow of gas.
  - 4. The structural integrity of all monitoring devices shall be maintained to ensure their workability and reliability.
  - 5. The structural integrity and erosion protection of the surface run-on/run-off structures shall be maintained on all areas of the capping system to ensure the stability of the slope and prevent excess erosion. The top grades shall be maintained at their proper slopes to minimize

ponding.

4. General Monitoring Requirements for Class III Sanitary Landfills

Monitoring shall be performed in accordance with the following parameters and schedules:

- (a) Sampling and analysis of water from the groundwater monitoring wells shall be performed in accordance with the NJPDES regulations, N.J.A.C. 7:14A.
- (b) Sanitary landfill gases shall be sampled and analyzed in accordance with the following:
  - 1. A gas quality analysis shall be performed on the gas venting and collection systems as constructed in accordance with N.J.A.C. 7:26-2A.7(f)3 and 4 on an as-needed basis as determined by the Division and the Bureau of Air Quality Engineering, pursuant to N.J.A.C. 7:27.
  - 2. A methane gas survey shall be performed on a quarterly basis and the results shall be submitted to the Division. If gas is detected within the buffer zone the Department may require more detailed and frequent surveys to be performed.
  - 3. The methane gas survey shall be performed with a hand-held portable explosimeter or equivalent and the minimum sampling depth shall be three feet below the ground surface or above the water table, whichever is higher.
  - 4. The sampling for the methane gas survey shall be performed on a quarterly basis around the perimeters of the buffer zone of active landfill areas and annually around the entire perimeter of the buffer zone of the sanitary landfill. The maximum interval between sampling points shall be 300 feet. Sampling shall be performed around the perimeter of all on-site structures. The maximum interval between sampling points for structures shall be 50 feet; however, there shall be at least one sampling point along each side of the structure. If repeated methane gas surveys consistently detect no methane gas around the perimeters of the buffer zone of the active landfill area or at any location around the entire perimeter of the buffer zone of the sanitary landfill, the maximum interval between sampling

points shall be increased and/or the sampling frequency shall be decreased, as approved by the Department, based on negative results at a particular location.

- (c) The Permittee shall submit an annual topographic survey of all areas of the sanitary landfill. The topographic survey shall be made between January 1 and March 31 of each year and submitted on or before May 1 of each year in accordance with N.J.A.C. 7:26-2A.8(i).

End of Section II

Section IIISpecific Conditions Applicable to the Facility1. Permitted Waste Types

The Permittee is authorized to accept the following waste types:

<u>ID</u>	<u>DESCRIPTION</u>
13C	Construction and demolition waste

The Permittee is not authorized to accept any other type or description of solid waste as defined at N.J.A.C. 7:26-2.13(g) and (h), regulated medical waste as defined at N.J.A.C. 7:26-3A.6(a), or hazardous waste as defined at N.J.A.C. 7:26-G(5).

2. Approved Designs, Plans and Reports

(a) The Permittee shall operate the facility, and construct or install associated appurtenances thereto, in accordance with the provisions of N.J.A.C. 7:26-1 et seq., the conditions of this permit, and the following permit application documents which are incorporated herein by reference:

1. "Revised Closure and Post-Closure Plan, Landfill Facility No. 1713B (A/B Landfill), Chambers Works Plant, Deepwater, New Jersey" prepared by DuPont Engineering Technology and dated April 2000.
2. "Environmental Health Impact Statement, Landfill 'B' Expansion, DuPont Chamber Works, Deepwater, New Jersey" prepared by Corporate Remediation Group and dated April 2000.
3. "Preliminary Operations and Maintenance Manual, Sanitary Landfill Facility 1713B (Landfills "A" and "B"), Chambers Works, Deepwater, New Jersey" dated August 25, 2000.
4. Engineering design drawings signed and sealed by John L. Gugliemetti, P.E. on April 24, 2000 as follows:

<u>Sheet No.</u>	<u>Title</u>
W1465154	Landfill Cover System Plan, Sections & Details Civil-Figure B-2
W1465154	Landfill Cover System Plan,



	Sections & Details Civil-Figure 2.3
W1465156	Drainage Plan, Sections & Details Civil-Figure 4.1
W1472382	Vertical Expansion Drainage Plan, Sections & Details Civil-Figure 4.2
W1472383	Vertical Expansion Landfill Cover System Plan, Sections & Details Civil-Figure 2.4

5. Engineering design drawings signed and sealed by John F. Bickel, P.E. on March 10, 2000 as follows:

<u>Sheet No.</u>	<u>Title</u>
1246SE.03	Soil Erosion and Sediment Control Plan-Figure G-2
1272SE.05	Soil Erosion and Sediment Control Plan

- (b) In case of conflict, the provisions N.J.A.C. 7:26-1 et seq. shall have precedence over the conditions of this permit, the conditions of this permit shall have precedence over the SWF permit application documents listed above, and the most recent revisions and supplemental information approved by the Department shall prevail over prior submittals and designs.
- (d) One complete set of the permit application documents listed in Condition 2(a) above, this Solid Waste Facility Permit, and all records, reports and plans as may be required pursuant to this permit shall be kept on-site at the plant and shall be available for inspection by authorized representatives of the Department upon presentation of credentials.

### 3. Approved Operations

#### (a) Landfill Service Capacity

The areal extent of the "B" landfill shall be approximately 19 acres.

Final elevation of the "B" landfill, including the final cover, shall not exceed elevation 37.74 feet above mean sea level (NGVD) (or 40.0 feet Chambers Works Datum) for the entire "B" landfill. All sideslopes shall be constructed as specified on the referenced engineering plans.

(b) Hours of Operation

The Permittee shall accept waste at the facility in accordance with the following schedule:

Waste Acceptance:

Monday through Friday: 7:00 a.m. to 5:00 p.m.

4. Construction Requirements

(a) Landfill's Final Cover System

1. The final cover for the landfill shall consist of the following capping system from top to bottom:
  - i. 6-inch topsoil layer
  - ii. 12-inch clean cover soil
  - iii. geosynthetic drainage composite
  - iv. 40-mil low density polyethylene geomembrane
  - v. 1-foot intermediate cover material layer

(c) Construction Quality Assurance/Quality Control (QA/QC)

1. Quality control inspectors shall be at the site during all phases of construction to ensure and verify that the approved sanitary landfill design and SWF permit landfill construction requirements are properly implemented.
2. The quality control inspectors shall, at a minimum, be at the site at all times during the construction of the final cover system. For the purposes of this section, quality control means those activities or responsibilities assigned to the construction contractor, manufacturer, installer or supplier to measure and regulate the characteristics or properties of an item in order to ensure that the applicable landfill construction requirements at N.J.A.C. 7:26-2A.7 and the SWF permit conditions are met. This includes those actions taken before, during, or after construction to ensure that the materials used and the completed workmanship are in conformance with the construction requirements at N.J.A.C. 7:26-2A.7 and the SWF permit.
3. The quality control measures and tests required by N.J.A.C. 7:26-2A.7 and described in the QA and QC plan submitted in accordance with N.J.A.C. 7:26-2A.5(a)7 shall be employed to ensure that the

construction requirements are properly implemented and that the design and performance standards are achieved.

4. Best available engineering construction practices shall be employed for all phases of the cap construction.

(e) As-Built Certification

1. A New Jersey licensed professional civil or geotechnical engineer shall certify, in writing, to the Department that he or she has supervised the inspection of the construction of each major phase of the sanitary landfill's construction. He or she shall further certify that each phase has been prepared and constructed in accordance with the engineering design approved by the Department, prior to operations. The certification shall include a final documentation report which shall summarize the daily quality control of construction activities as required by N.J.A.C. 7:26-2A.7(a)14 and shall include as-built drawings.
2. A New Jersey licensed professional civil or geotechnical engineer shall certify that the materials utilized in the final cover system is in conformance with and meet the specifications of the approved engineering design.
3. There shall be no deviation made from the approved engineering design specification without the prior written approval of the design engineer and, at a minimum, prior verbal approval by the Department.
4. All certifications shall bear the raised seal and signature of the licensed professional engineer, and the date of certification.
5. The certification shall include the following: "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals under my supervision, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. I understand that, in addition to

criminal penalties, I may be liable for a civil administrative penalty pursuant to N.J.A.C. 7:26-5 and that submitting false information may be grounds for denial, revocation or termination of any solid waste facility permit for which I may be seeking approval or now hold."

5. Special Conditions

(a) "A" Landfill

This Solid Waste Facility permit does not authorize filling operations at the "A" landfill. The "A" Landfill shall initiate final cover construction in 2003 and complete it by the end of 2004.

(b) Additional Groundwater Sampling

Groundwater sampling, in addition to that required by the NJPDES regulations, N.J.A.C. 7:14A, shall be conducted on 4 wells for 4 quarters. Samples shall be collected from the 4 wells and screened for the presence of radioactive isotopes.

Two upgradient wells (R09-M01B and U12-M01A), one downgradient well (O12-M01B) and one interceptor well (Q13-R01C) shall be sampled. All groundwater samples shall be analyzed for Uranium 234, 235 and 238 (total and dissolved) by EPA 908 Modified and Gross Alpha and Beta by EPA 900 Modified.

Results from the testing shall be forwarded to Sukhdev S. Bhalla, P. E., Chief, Bureau of Landfill and Recycling Management, Department of Environmental Protection, P.O. Box 414, Trenton, New Jersey, 08625. Should the results indicate radiation levels high enough to be of concern, the Department reserves the right to require continued testing.

(c) Submission Schedule for Monitoring

The following information shall be submitted to the Bureau of Landfill & Recycling Management, Division of Solid and Hazardous Waste:

<u>Document</u>	<u>Frequency</u>	<u>Due Date</u>
Methane gas survey	quarterly	January, April, July, October
Topographic survey	annually	May 1

Groundwater Sampling	quarterly	January,
April,		
(pursuant to 5(b) above)		July, October

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